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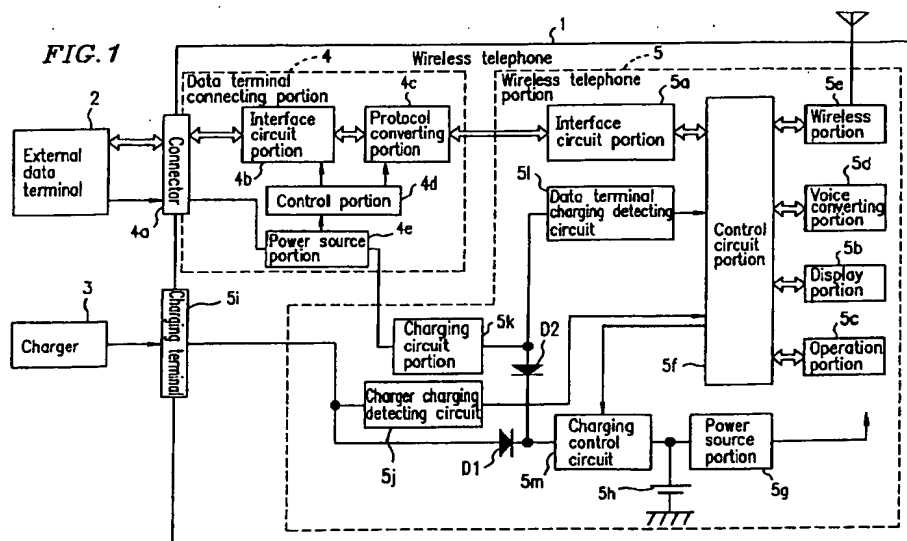
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### (54) Portable wireless communication device

(57) A portable wireless communication device performing data communications through a network, includes: a secondary battery; and an interface portion detachably connected to an external data terminal, for transmitting data to and receiving data from the external data terminal and for receiving an electric power from

the external data terminal, wherein the portable wireless communication device is operated with at least one of an electric power from the secondary battery and the electric power input from the external data terminal through the interface portion.



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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 10 3501

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	WO 96 21900 A (INTEL CORP) 18 July 1996 (1996-07-18)	1-3,5,6	H04Q7/32
A	* page 5, line 1 - page 14, line 9 * ---	4	
X	EP 0 545 088 A (NIPPON ELECTRIC CO) 9 June 1993 (1993-06-09)	1,2	
A	* column 3, line 53 - column 7, line 35 * --- EP 0 494 780 A (TOKYO SHIBAURA ELECTRIC CO ;TOSHIBA COMMUNICATION TECHNOLO (JP)) 15 July 1992 (1992-07-15) * column 4, line 11 - column 9, line 51 * -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)  H04Q H04B H04M
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>24 November 1999</b>	Examiner <b>Maalismaa, J</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on  
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24-11-1999

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9621900	A	18-07-1996	US 5870615 A	09-02-1999
			AU 4601596 A	31-07-1996
			EP 0803097 A	29-10-1997
			FI 972900 A	08-09-1997
			JP 10512378 T	24-11-1998
-----				
EP 0545088	A	09-06-1993	JP 2746281 B	06-05-1998
			JP 5130265 A	25-05-1993
			DE 69220191 D	10-07-1997
			DE 69220191 T	30-10-1997
			US 5511240 A	23-04-1996
-----				
EP 0494780	A	15-07-1992	JP 4250757 A	07-09-1992
			JP 4239249 A	27-08-1992
			JP 4239250 A	27-08-1992
			JP 4239251 A	27-08-1992
			CA 2059189 A,C	12-07-1992
			DE 69218465 D	30-04-1997
			DE 69218465 T	03-07-1997
			KR 9604319 B	30-03-1996
			US 5584055 A	10-12-1996
			US 5590414 A	31-12-1996
			US 5444867 A	22-08-1995
			US 5367556 A	22-11-1994
-----				

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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